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PROBLEMS IN EVALUATING LATIN AMERICAN DEVELOPMENT

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## PROBLEMS IN EVALUATING LATIN AMERICAN DEVELOPMENT

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### I. INTRODUCTION

In the March 1966 issue of this journal, Professor Keith B. Griffin identifies and discusses a number of crucially important factors bearing upon the uneven character of Latin America's economic, social, and political development.<sup>1</sup> The Western world economic system of "mercantile capitalism," as he terms it, has resulted in the gains from economic progress being "unequally" and "inequitably" distributed both among nations and within nations. The apparently substantial rates of development in Latin America frequently reflect an expansion of exports of primary products with the gains going largely to foreign interests. Within Latin America, poorly operating labor and capital markets and defective price systems functioning in an environment of intense class struggle have led to an inequitable distribution of national income with the lower class, rural masses especially suffering. The ability of the wealthy landlord to "exploit" his laborers, the desire of the rising middle classes to imitate the behavior of upper classes, and the tendency for major political parties to cater to the "organized and privileged elites" have combined to systematically deprive the lower classes of the fruits of economic progress.

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<sup>1</sup> Keith B. Griffin, "Reflections on Latin American Development," Oxford Economic Papers, March 1966.

In view of the importance of the topics Professor Griffin discusses, it is especially unfortunate that his treatment is marred by a number of notions and conclusions that leave the reader with an unnecessarily distorted view of Latin American development. The situation is all the more disquieting because many of the threads of analysis in his paper serve to perpetuate and support questionable views repeatedly voiced by other writers who enjoy a wide and sympathetic audience, especially in Latin America itself.

Rather than to offer a point-by-point critique of Professor Griffin's analysis, which would be too lengthy for presentation here, I shall concentrate on three major aspects with which he is concerned: 1) Sources of past growth particularly with respect to the role of foreign investment, 2) The distribution of income as a reflection of class conflict, and 3) Alternative possibilities for reform. Hopefully this effort will contribute in some ways to setting the record straight and provide a clearer notion of the problems and prospects of development in Latin America.

## II. SOURCES OF ECONOMIC GROWTH

In evaluating Latin America's present position and future prospects, sources of past growth are of major relevance. As shown in Table 1, Latin American growth rates (in terms of recorded per capita increases in GNP) for the region as a whole have been positive in recent years, though they have fallen below those recorded for most other areas of the world. Questions immediately arise about the meaningfulness of this growth experience, and the extent to which sources of past growth can be relied upon for continued progress.

### THE ROLE OF FOREIGN ENTERPRISE

Many observers have complained that Latin America has been too dependent for growth on the export of primary products. Not only are these goods subject to wide fluctuations in world demands but, so it is frequently alleged, foreign investors heavily involved in many of these activities reap much of the benefit at the expense of Latin America. As a case in point, Professor Griffin contends

Table 1

GROSS NATIONAL PRODUCT: ESTIMATED ANNUAL GROWTH RATES,  
1957-1958 AVERAGE TO 1963-1964 AVERAGE

	<u>Compound Annual Growth Rate (Percent)</u>		
	<u>Total GNP</u>	<u>Population</u>	<u>Per Capita GNP</u>
Latin America (excl. Cuba)	<u>4.1</u>	<u>2.8</u>	<u>1.3</u>
Near East	5.5	2.3	3.2
South Asia	4.4	2.3	2.1
Far East <sup>a</sup>	5.6	2.8	2.8
Africa <sup>b</sup>	3.4	2.3	1.1
United States	3.7	1.6	2.1
Europe	4.8	1.0	3.8

Notes:

<sup>a</sup>Excludes Indonesia and Japan.

<sup>b</sup>Excludes South Africa and Congo.

Source:

Agency for International Development, Reports and Statistics Division,  
"Estimated Annual Growth Rates of Developed and Less Developed Countries,"  
April 19, 1965.

without empirical support that "rates of growth recently enjoyed by the fragmented economies of Latin America are largely illusory. Where growth has occurred it frequently has been due to a rapid expansion of foreign demand for primary exports, e.g., petroleum and iron ore in Venezuela, and the lion's share of the benefits has been captured by foreign interests." (p. 2) Aside from the ambiguity of the concept of "illusory growth" this statement raises issues about the distribution of benefits between host countries and foreign investors, and the special problems associated with dependence on primary goods exports, to which we shall now turn.

Evidence bearing upon the distribution of benefits between foreign-owned firms and host countries is spotty and far from complete, but what little I have seen does not lend support to the idea that foreign firms have gotten the "lion's share" (however we would define such a nebulous term). Table 2 reproduces data obtained in a U.S. Department of Commerce study made some years ago. If, as a very rough cut, we regard net income after taxes as reflecting total net benefits to the firms, and local taxes as reflecting total net benefits to the host countries, the total tax receipts of \$1098 million and net income of \$697 million, would suggest that the countries received about 60 per cent of the total benefit. In the case of petroleum in Venezuela -- specifically mentioned by Professor Griffin -- tax revenues were \$428 million compared with \$409 million in net income.<sup>1</sup>

Of course, an adequate evaluation of benefits involves much more than simply looking at net income and local taxes. As a second approximation, one would also want to take explicitly into account the opportunity costs of foreign and local resources (labor, materials, plant and equipment, etc.) required for production. Net income figures mentioned above exaggerate the net benefits to the firms to the extent that these returns must cover interest on the investment and other components of "normal" profits. Thus, net benefit, measured by "excess" profits, would constitute some fraction of the profit figures noted above.

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<sup>1</sup> Ibid., pp. 128, 188.

Table 2

U.S. COMPANIES OPERATING IN LATIN AMERICA IN 1955  
LOCAL PAYMENTS AND NET PROFIT

(million of dollars)

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Wages and salaries	1,009	
Materials, supplies, and equipment	1,768	
Interest, royalties, and dividends	46	
Income taxes	687	
Other taxes	411	
Other and unspecified	<u>392</u>	
Total local payments	<u>4,314</u>	
Net income		697

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Source:

U.S. Department of Commerce, U.S. Investments in the Latin American Economy, pp. 117, 124.

With respect to local resources, prices paid by the firms probably reflect quite poorly the opportunity costs to the host economy. On balance, it is probably reasonable to assume that opportunity costs fall somewhat below the costs to the foreign firms -- to the extent that resources employed by these firms would otherwise be unemployed or employed in less socially valued pursuits, the economy enjoys an additional net positive benefit.

Taking into account local opportunity costs together with foreign costs, the relative share of benefits going to host countries is even greater than the figures mentioned earlier. On one hand the net profit figure in Table 2 overestimates the net benefits to the firms. On the other, net benefits to countries exceed the value of tax revenue. Again, the analysis provides little comfort to those who contend that "foreign interests" get the "lion's share."

To go a step further, foreign investments affect host economies, both for better and worse, in many ways that do not show up nicely in accounting figures. In particular, there are probably many cases where the behavior of foreign interests has conflicted directly with the welfare of host countries. The question of sharing the benefits is only one aspect of the broader problem of how foreign firms impinge on the economic and political environment of countries in which they operate.<sup>1</sup> This area deserves long and careful study. Undocumented sweeping assertions so prevalent in this field seldom advance our state of knowledge, though they have great emotional appeal in some quarters.

#### DEPENDENCE ON PRIMARY EXPORTS

By now we have an enormous literature dealing with the dependence of less developed countries on one or a few primary commodities as the means to obtain essential capital goods and other manufactures from the outside. Much of the literature has been concerned with

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<sup>1</sup>For some evidence relating to this problem see my paper, "U.S. Business Interests in Cuba and the Rise of Castro," World Politics, April 1965. See also the provocative paper by Hans Singer, "The Distribution of Gains Between Investing and Borrowing Countries," American Economic Review, May 1950.

three related questions: (a) Whether the terms of trade of primary exporters have deteriorated over the long run, (b) How countries might protect themselves, as through commodity agreements, against temporary sharp fluctuations in export prices, (c) Whether the projected needs of these countries for imports in the future will outstrip their ability to supply exports. Professor Griffin's concern about the "illusory growth" of Latin America apparently stems from question (c). He contends that rapid export expansion is "not expected to continue" (p. 2) because according to U.N. 20-year projections, Latin American exports to the outside world "will increase at annual rates ranging from less than 2 per cent ... to a high of nearly 4 per cent ... compared with the 6.5 per cent annual rate of growth of imports of the region." Given the extensive discussion already devoted to this issue I shall limit myself to three brief observations:

1. Long-term projections of demand frequently turn out to be wide of the mark, largely because demand is affected by a host of subsequent events that the forecaster simply cannot foresee or evaluate ahead of time. To make just one example, recently the price of copper in Chile was raised from 42 to 62 cents. If the price rise is sustained, it will bring to Chile something over \$100 million per year in additional foreign exchange. This event was not, and could not have been, predicted say in 1963 or 1964 because a major contributing factor is the war in Viet Nam which, like the earlier Korean War, has tended to bolster the demand for industrial primary products.<sup>1</sup> If new local wars break out, demand for many primary products will be strong; if the advanced countries suffer recession, demand will fall; if consumer tastes shift toward or away from products with a high primary content, demand for affected goods will vary accordingly; if major technical breakthroughs are made in fuel-cell electrical power, the demand for petroleum will likely fall; if technical changes take place to permit a higher level of substitution

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<sup>1</sup>Also, in the case of Chilean copper, future prices will depend on the level of competing production in Zambia which in turn will depend on far more than purely economic considerations, i.e., the course of relations with Rhodesia.

of aluminum for copper, they would work to the disadvantage of Chile and Peru, but would improve the prospects for Jamaica, Surinam, and Guyana. Finally, if exporters of particular primary products succeed in establishing and enforcing agreements to restrict output and raise prices, they will do better than would otherwise be the case. In short, I would suggest that uncertainty with respect to future foreign exchange earnings, and the attendant short-term sharp fluctuations in receipts, is a problem that merits much more concern than the prospects, posed by some analysts, that long-run trends will be unfavorable.

2. In the past there has been a tendency to treat the less-developed world vis-a-vis the advanced world as if each of the two were somehow economic monoliths, where one unambiguously gains and the other unambiguously loses depending on the set of postulated circumstances. Less-developed countries are, of course, not a homogeneous lot, and many changes (such as the aluminum-copper substitution noted above) can generate both losses and gains within the group. In this sense, to talk about long-run trends for "Latin American" exports can be misleading insofar as it ignores the intraregional distribution of benefits. As Habeler has observed:

"Considering for a moment Latin American countries only, it would be a strange coincidence indeed if, in the long run, the commodity terms of trade, let alone the factoral terms of trade, moved parallel for coffee countries, mining countries, petroleum exporters, and exporters of wheat, wool, and fats. The same holds of the other side of the fence. The dissimilarity of the trade structure of developed countries is hardly less pronounced than that of underdeveloped countries."<sup>1</sup>

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<sup>1</sup>Gottfried Habeler, "Terms of Trade and Economic Development" in Economic Development for Latin America (ed. by H. S. Ellis), New York, 1962, p. 281. See also the excellent survey, with its many footnoted references, in T. Morgan, "Trends in Terms of Trade, and their Repercussions on Primary Producers," in International Trade Theory in a Developing World (ed. by R. Harrod and D. Hague), New York, 1963.

3. Aside from the issue of future world demand for primary goods, I would conjecture that specialization in extractive primary goods is disadvantageous relative to specialization, say, in manufacturing in that the former generate relatively weak favorable externalities to the rest of the economy. That is, mining and petroleum enterprises, for example, tend to operate as enclaves in the host economy; many of the labor skills required for these activities are quite specialized with relatively little carry over to the needs of the rest of economy; the overall employment effects are low given the typically high capital intensities encountered (as in petroleum refining), much of the capital equipment is highly specialized and must be imported (thus weakening the backward linkage effect); in some cases few opportunities arise to stimulate forward linkages (readily available Venezuelan petroleum may stimulate a quite promising domestic petrochemical industry, but in the case of Chilean copper and Bolivian tin there is little alternative to exporting at a crude stage of fabrication.) We should note, however, that these considerations have nothing directly to do with whether the industry in question is foreign-owned or domestically-owned. Quite apart from questions of ownership, the very nature of extractive industries may provide good reason for biasing the process of development away from them.

#### MANUFACTURING AS A SOURCE OF GROWTH

Professor Griffin notes that the manufacturing sector also has been a major source of past growth. However, he is pessimistic about the future because "much of the industrialization ... has not been <sup>primarily</sup> due/to the initiative of native entrepreneurs." Rather, it has been largely due to foreign investment, and government enterprise, while domestic-private interests have been usually confined to "small consumer goods industries" or to "satellite factories" of the foreign and government-managed enterprises. He further contends that "even these private manufacturing investments were frequently undertaken by immigrants, who no longer are attracted to the region in large numbers." From all of this he concludes that "the continued rapid expansion of industry is unlikely unless the recent attempts to integrate the Latin American economies are successful." (p. 2)

This chain of reasoning raises several questions. First, to the extent there is serious shortage of native entrepreneurship in Latin America that would restrain future industrial expansion, it is not obvious that Latin integration by itself will solve the problem -- simply reducing or eliminating trade barriers among countries would likely not serve as a strong stimulant if they all suffer such a shortage of entrepreneurial skills.<sup>1</sup>

Second, even if immigrant flows of potential entrepreneurs has fallen off, it is not clear why the sons of earlier immigrants would not provide a basis of a new entrepreneurial class. In Chile, in fact, I have personally seen many examples of enterprises operated by second and third generation families. Third, even though entrepreneurship is surely important to vigorous industrial expansion, it is not the only consideration. Prospects for the future depend in part on whether government policies toward industrialization are well conceived or badly conceived, whether the supply of foreign exchange for needed industrial imports continues to grow, whether there is an adequate supply of industrial labor skills, and whether prospects open up for exports of manufactured goods to advanced countries.<sup>2</sup> Fourth, certainly it is not out of the question that a growing industrial sector will itself stimulate the growth of a native entrepreneurial class. In fact, one would normally expect that early development would depend largely on foreign investment and imported entrepreneurship, with progressively greater reliance on domestic investors and entrepreneurs as the economy moves to higher stages of development.

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<sup>1</sup>Reading the vast literature on integration, one has the uncomfortable feeling that many writers entertain grossly exaggerated expectations of the benefits that will accrue from integration. Granted that integration would be a move in the right direction, by itself it will surely leave many problems untouched.

<sup>2</sup>An interesting discussion of this possibility is contained in H. G. Johnson, "Tariffs and Economic Development," The Journal of Development Studies, October 1964, pp. 22-24.

### THE ROLE OF SERVICES

Rapid expansion of the services sector is another source of growth of GNP. However, according to Professor Griffin, expansion in this sector "is a mere reflection" of rapid population growth, the lack of employment opportunities in agriculture, and migration from "rural areas to urban slums." On this basis he moves to the remarkable statement that the growth of the services sector "represents virtually no increase in economic welfare" and goes on to contend that "apparent increases (his italics) in the services sector should be ignored completely in calculating the rate of growth of national income." (pp. 2-3)

What sense can be made of such a statement is elusive. Granted that there is lots of underemployment in urban areas, it is still true, I should hope, that whatever remunerative services people are able to perform (at however low a wage) would represent a higher level of welfare than would be the case in the absence of these services. Perhaps the implication to be drawn is that these people would have been better off remaining in rural areas; yet Professor Griffin goes to considerable length in discussing the "deplorable" conditions of the rural masses. The fact that so much migration takes place from rural to urban areas is prima facie evidence that migrants believe they are better in urban areas, though in absolute terms, of course, they may still remain quite badly off.

In concluding this section, I would like to go a step further and mention briefly one factor not treated by Professor Griffin that can contribute to "illusory growth" (to borrow his phrase): The process of urbanization itself brings about a rise in consumption of goods and services traded in the market as a substitute for self-use productive activities in rural areas that tend not to get counted in income statistics. Thus as Professor Nove has observed with respect to the Soviet Union:

"For instance there was a spectacular growth in the number of bakeries, meat processing plant and much else besides, reflecting neither increased welfare nor increased consumption of these commodities, but simply urbanization ... all backward peasant countries experience the same thing when

they industrialize. The relevant thing to bear in mind is that this factor has tended to expand measurable industrial growth and that process tends to slow down through time."<sup>1</sup>

### III. THE DISTRIBUTION OF INCOME

#### GAINS FROM TRADE

The badly skewed distribution of income, the dualistic character of much of the development that has taken place, and the slow speed of social progress are, of course, sources of widespread concern. In dealing with this area, Professor Griffin suggests that the benefits from trade are not only unevenly distributed, but that some regions can be made absolutely worse off as a consequence. He attempts to document this interesting hypothesis by examining conditions in the Peruvian Sierra. Among other things, he finds (p. 5) that in 1959 the value of exports from the Sierra ran to 4194 million soles while imports ran to only 1843 million, leaving an export surplus of 2351 million soles. From this observation, he concludes that the Sierra's "level of consumption was lower than it would have been had there been no trade" (his italics.)

This conclusion seems to imply that without trade the region could have consumed the 4194 million soles worth of goods that would otherwise be exported in exchange for only 1843 million of soles worth of imports. But immediately at least two problems arise in this sort of interpretation:

1. Undoubtedly some of the imports into the Sierra (such as minerals, industrial products and services) enter as inputs into the export sector. It is reasonable to presume that without trade production of potential exports, as well as production for local consumption, would have fallen because of the lack of essential imports. Depending upon the technical production relationships involved, the reduction in output of goods available for local consumption in the absence of trade could have exceeded the export surplus with trade.

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<sup>1</sup>A. Nove, "The Pace of Soviet Economic Growth," in Readings on the Soviet Economy, (ed. by F. D. Holzman, Chicago, 1962, pp. 156-57.

2. Even if total physical production in the Sierra were not affected by the lack of imports, we would still have the problem of attaching a valuation to the level of consumption. Though the Sierra's exports are worth 4194 million soles in the external market, what would the resources otherwise devoted to export production be worth in the local market? (In the absence of international trade, what would Canada do with all that wheat?) Moreover, what is the welfare loss to the Sierra of giving up imports that in the outside market are worth 1843 million soles? It is not difficult to imagine circumstances under which the Sierra's inhabitants would be more than willing to trade 4194 million soles of export goods for 1843 million soles of import goods valued at outside prices. In such cases trade would permit them to enjoy an increase in their level of consumption, defined in the relevant welfare sense, despite the export surplus.<sup>1</sup>

Professor Griffin contends that the export surplus is compensated by payments to landlords who, rather than depositing their receipts in the region's banks, deposit them in Lima. From this he concludes that "the rate of growth of the Sierra is lower than it would have been in the absence of trade" (p. 6, his italics). First, it is clear that the physical location of the banks is irrelevant. The problem is not where the savings are held but where investment contributing to growth is made. People could hold their savings in Lima (or New York or London for that matter) while other people (or even the same people) invest in the Sierra. Conversely, savings held on deposit in the Sierra itself would not necessarily mean that investment contributing to growth is made there -- the savings could be held as idle hoards.

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Ordinarily, one would suppose that trade itself is prima facie evidence that the inhabitants are better off, otherwise they wouldn't have made the exchange. But here we are not treating a situation of smoothly functioning competitive markets, but one in which trade is imposed by a group of landlords on the inhabitants (defined as those people in the region outside the landlord class).

It is true, quite apart from the location of the banks, that the savings of the region would exceed investment in the region by the amount of the export surplus.<sup>1</sup> Therefore, if both export and imports were eliminated, investment would rise to stimulate growth. But again we face the problems in the previous case of consumption: to the extent that imports enter as inputs into local production their elimination would force a reduction in the region's output adversely affecting consumption, saving and investment. Even if resources otherwise devoted to generating the export surplus could all be invested locally in the absence of trade, the elimination of cooperating inputs from the outside would reduce the marginal efficiency of investment and the marginal productivity of the existing capital stock. The net no-trade effect on growth, under these circumstances, could quite conceivably be negative.

Moving beyond these considerations we are left with the question whether reasonable assumptions could be set forth under which a region can be made absolutely worse off as a consequence of trade. One situation -- also noted by Professor Griffin -- relates to the loss a region can suffer as a consequence of the tendency for its skilled and ambitious workers to be drawn away by superior attractions offered elsewhere. Situations are easily imaginable in which people remaining in a region are made worse off as a consequence of a unilateral transfer of highly valued human resources out of the region. However, such a phenomenon cannot be attributed to the presence of trade, per se, but rather it arises out of improved transportation, communication and education that, in general, serve to increase the mobility of resources.

A second way in which these remaining inhabitants could conceivably be better off without trade is that the landlords, who now "exploit" their workers, would find the region in the absence of trade much less economically attractive as a place to tie up their own assets. As a consequence, they might be drawn away from the region

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<sup>1</sup> Here we presume a no-government aggregate model in which savings plus imports are equal to exports plus private investment.

to relatively more attractive opportunities -- to the cities, perhaps, or to other countries. While the remaining inhabitants might be worse off in a material sense without trade, for the reasons noted above, conceivably the removal or diminution of the influence of an oppressive landlord class would constitute a source of utility to them more than offsetting the material loss. But we should note that this argument has nothing to do directly with the presence or size of the region's export surplus. In the welfare sense treated here, a region's inhabitants conceivably could be better off without trade even if the region's export surplus with trade were zero.

#### PROFITS AND TECHNICAL CHANGE IN AGRICULTURE

Pursuing the idea that the position of the rural worker has continued to deteriorate, Professor Griffin notes that landowners receive enormous profits from their "monopolization" of the land and their favorable bargaining position with workers. He adduces evidence showing that in the Ecuadorian Sierra "the average hacienda earns 33 per cent gross profit (excluding amortization) on its sales receipts ..." (p. 12), and he presents an additional breakdown indicating for two specific cases a profit level 66.5 per cent and 39.9 per cent of total gross income (p. 13). From this he concludes that "It should not be difficult to understand why agricultural techniques of production have not changed radically from one century to another." Despite the fact that many writers have attributed slow technical change to the large profits of landowners, this view is open to nagging doubts. Conventional microeconomic theory tells us that ordinarily the firm seeking to maximize profits will always find advantageous a technical change that causes a downward shift in its average and marginal cost curves, regardless of the absolute size of its profits in the absence of the technical change. The fact that the firm (or landowner) enjoys high profits initially is not prima facie evidence that possibilities of further technical change will be ignored. Against this, however, one could argue that (a) positive costs are involved in seeking out and exploiting opportunities of technical change, (b) the marginal utility of income to landowners rapidly declines as a function of size

of income, and (c) at the levels of income landowners do receive in Latin America the utility of additional income is so low that it is not worth the trouble to introduce technical changes which, by reducing costs, would further increase income. Or one could pursue an alternative argument in which (a) technical change involves costs as above, (b) maximization of monetary profits is not the sole objective of the landowner (conceivably the attainment of such things as a comfortable and secure level of income, a high level of prestige in the society, and a strong sense of worth for oneself and one's family play a central role), and (c) landowners, having already attained these goals, have little incentive to incur the costs of technical change for the sake of additional monetary gain. However, neither of these arguments can be appraised by appealing to the kinds of profit data that Professor Griffin, as well as many others, have adduced. We cannot say that, by itself, a rate of return of 39.5 per cent or 66.5 per cent of "387,156 Ecuadorian sucres" (p. 13) necessarily places the landowner on a point on his utility surface where the marginal utility of additional income is too low to make cost-reducing technical change worthwhile. Nor can we say that profit data alone indicate that he has satisfied his multiple objectives to the point where he no longer strives for technical change. In short, since the nature of the utility surface of the landowner is in doubt, since it is not clear where a given level of income would place him on that surface, and since the costs of technical change are not specified, the mere recital of profit data tell us little if anything about barriers to technical change.

In the light of this discussion, I should like to go on to present some notions, having nothing directly to do with recorded levels of profits, that may explain why technical change has been slower in some countries than one might wish.

I would suggest that in the case of large landholdings with absentee ownership much of the problem arises from the disruptive effects that rapid technical change would have on the relations between the landowner and his subordinates (as well as with the rest of society) and the threat that technical change would pose to the landowner

and by giving the appearance of being an assiduous worker, instill in his relatively idle peer group feelings of guilt that would adversely affect his relations with them.

Thus, the difficulties of effectively delegating responsibility, the threat of technical change in terms of increasing the mobility of resources, and the disruptive effects on the landowners' social position may serve better to explain a low rate of technical change than does the level of recorded profits per se that landowners now enjoy.

At the same time, we must recognize that some progress in agriculture is being made. In general, Latin America with all its problems has succeeded over the past decade or so in achieving an increase in productivity (measured as the ratio of output to farm population.) The data available for several countries in Table 3 provide rather striking evidence of the gains that have taken place. They offer little support to Professor Griffin's sweeping generalization that "the stagnant agricultural sector has been the principal factor restraining development." (p. 3)

#### IV. INGREDIENTS OF REFORM

##### PRESENT-DAY GOVERNMENT PROGRAMS

With particular reference to Chile and Peru, Professor Griffin is critical of the bias of present-day governments toward urban consumption and investment, and their inability or unwillingness to push more quickly toward improving the lot of the rural masses. He singles out Chile's Frei Government for criticism on grounds that its "promoción popular" is chiefly concerned with "increasing welfare measures and consumption of the low income urban classes." (p. 17) It is distressing that he does not mention, even in passing, that in addition to "promoción popular," the Frei Government is also pushing hard to legislate an extensive land reform program under which large estates would be expropriated, the land subdivided, and provided on reasonable terms to the previously neglected rural poor. If the program is a success, it will contribute a good deal to improving the position of those who have been so neglected in the past. Similarly, he criticizes the Peruvian scheme of "cooperación popular" without

Table 3

OVERALL CHANGES IN AGRICULTURAL OUTPUT AND FARM POPULATION  
1950-1960

	Increase in Output (Percent)	Increase in Rural Population (Percent)
Brazil	45	17
Chile	48	9
Colombia	46	25 <sup>a</sup>
Costa Rica	71	33
Mexico	77	16
Venezuela	86	10 <sup>a</sup>

Note:

<sup>a</sup>Economically active rural population (comparisons for period 1950-1961).

Source:

U.S. Department of Agriculture, Agricultural Production in 26 Developing Countries, pp. 6, 63, 67.

mentioning the Belaunde Government's agricultural programs involving resettlement, parcelization and technical assistance.<sup>1</sup>

Moreover, Peru and Chile are not the only countries attempting to move ahead in the agricultural sector. Barraclough and Domike, for example, have concluded,

"The traditional class structure and income distribution patterns that have brought stagnation to the economies and perennial poverty to the "campesinos" are now repudiated by all major political groups. Better living levels, education for all and the full participation of "campesinos" in national society are the avowed goals of every Latin American government and of the Alliance for Progress."<sup>2</sup>

Professor Griffin notes correctly that "any programme designed to improve conditions for the underprivileged mass of the population must concentrate ... on changing their relationships with the rest of society." (p. 8) But the rural poor is not the only underprivileged class. Surely one cannot dismiss out of hand the urban unemployed slum dwellers. Any government sensitive to the needs of the whole society will necessarily be involved in a delicate balancing act in which it will pursue programs in both rural and urban areas in an attempt to change the relationships of a number of groups with the rest of society. While it is easy to criticize any particular government for putting too much emphasis here and not enough there, one must keep in mind the central question as to whether the government is moving in the right, rather than the wrong, direction and at the same time recognize that given the many impediments to change, progress will very frequently be disappointingly slow.

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<sup>1</sup>Curiously, Professor Griffin criticizes Peru's "cooperación popular" also on grounds that "the emphasis ... has been on constructing provincial roads and schools. These are measures which increase labor mobility and skills, but they do not directly increase productivity." (p. 17) One wonders how Professor Griffin proposes to directly increase productivity without resort in one way or another to increasing labor mobility and skills.

<sup>2</sup>Solon L. Barraclough and Arthur L. Domike, "Evolution and Reform of Agrarian Structure in Latin America," Instituto de Capacitación e Investigación en Reforma Agraria, Santiago, Chile, p. 4 While one might be less than optimistic about the prospects of success, given the enormous difficulties Chile, Peru and other countries face, we cannot ignore present-day efforts of reform, and the growing general awareness of rural problems, in any sound assessment of government programs and policies.

### THE ATTRACTION OF LABOR INTENSIVE PROJECTS

Many economists have been intrigued with the various possibilities of using "surplus" agricultural labor for activities that would have higher value to society. Some have argued in favor of large-scale transfer from agriculture to the industrial sector. In the words of Sydney Dell:

"The typically underdeveloped country does not face a choice of whether to employ labor in agriculture or industry. It usually has so much underemployed labor on the land that it can transfer labor resources to industry without much consequential reduction in agricultural output. Insofar as the output of industrial products can be increased by an underdeveloped country without reducing the output of agriculture, this represents a net gain of real income to the economy. And this is true no matter how inefficient the industrial production may be ..." (his italics).<sup>1</sup>

Another possibility is to pursue labor-intensive agricultural projects perhaps along the lines of those advocated by Professor Balogh. He observes "it is obvious that the only way in which the large mass of idle manpower can effectively be used without scarce and costly implements (or other scarce materials) is agricultural improvement."<sup>2</sup>

While perhaps a useful strategy under some circumstances, mobilizing surplus agricultural labor for either industrialization or agricultural improvement encounters at least two problems that one must seriously take into account in making sound recommendations for reform: a) It is highly debatable whether marginal productivity in agriculture is near zero on the widespread basis suggested by Dell, Balogh and many others.<sup>3</sup> b)

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<sup>1</sup> Sydney Dell, Trade Blocks and Common Markets, New York, 1963, p. 212. Particularly in the case of Colombia, this approach to accelerated industrialization is advocated by Lauchin Currie in his book, Accelerating Development, Inglewood Cliffs, 1966. See also the classic theoretical treatment in W. A. Lewis, "Economic Development with Unlimited Supplies of Labor," The Manchester School, May 1954.

<sup>2</sup> T. Balogh, "Agricultural and Economic Development," Oxford Economic Papers, February 1961, p. 34.

<sup>3</sup> See, for example, the discussion by Theodore W. Schultz, Transforming Traditional Agriculture, New Haven, 1964, pp. 53-70, and Steven Enke, Economics for Development, Inglewood Cliffs, 1963, pp. 124-127.

Even granting for the sake of the present discussion a marginal productivity of zero, problems arise of mobilizing, organizing, transporting, and providing complementary factors to equip a surplus agricultural labor force. The fact that the peasant sitting in his mud hut may have a marginal productivity of zero may, by itself, be of quite secondary importance when considering the economics, say, of constructing a major labor intensive irrigation project which could be far removed from the peasant's existing mud hut. Immediately, major questions would arise as to (a) how to obtain the necessary human skill to design the project in the first place, (b) how to transport surplus labor in cases where transportation may be rudimentary, if it exists at all, (c) how to move food and other supplies along with the peasants for necessary subsistence (for even if they consume food in adequate amount for their traditional pursuits, the movement of labor will not automatically be accompanied by the movement of food), (d) how to provide laborers with housing and infrastructure at the construction site, (e) how to induce them to move away from their family and family surroundings to undertake new work (even if opportunity costs are zero, a positive wage may have to be paid), (f) how to provide them with complementary factors of production, such as simple equipment, tools, and managerial guidance. While Professor Balogh has contended that "most of the linked public works could, as in China, represent undertakings which do not need implements or material" (his italics),<sup>1</sup> one could question the extent to which this is true. It is difficult to imagine workers making much of a contribution to increasing agricultural productivity without tools to dig, cement, steel and timber for construction, and especially technical manpower for designing, organizing and guiding such projects through to a successful conclusion.

Consequently, one has reason to be dubious when confronted with the sweeping judgment of Professor Griffin, who is impressed with the experience of mainland China: "It has been conclusively demonstrated - in China and elsewhere -- that properly organized labor-intensive rural investments (a) are an excellent way to mobilize the masses for

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<sup>1</sup> op. cit., p. 37.

development, (b) are inexpensive, (c) can have a very short gestation period, and (d) provide large returns on capital expenditure. (p. 17)"

Evaluation of the Chinese experience suggests a more cautious interpretation. While evidence is very sketchy and woefully incomplete, indications abound that China has had much difficulty precisely because she has not been able to cope with some of the problems listed above.

As Reubens has summarized:

"The regime failed to distinguish real idleness from minimum necessary leisure, failed to recognize various productive activities during the off-seasons of field agriculture, and failed to evaluate existing low-productivity operations by reference to the social need for their product and the lack of alternative sources of supply ... an economy like China's does present a number of fields where incremental labor can operate productively with few complementary inputs of scarce materials and equipment, but the Communist regime overextended the allocations, sending recruited labor into fields of substantial costs in inputs, and also into fields where the marginal product of additional labor was not merely nil but actually was negative, and into fields where a certain minimum of technical guidance proved to be indispensable."<sup>1</sup>

Examining the results of irrigation projects in particular, Wen-Shun Chi notes a number of examples in which China's experience was unfortunate. For example, he relates that during the period 1950-1958 millions of cubic metres of earth work and masonry (reportedly equal in volume to excavating 960 Suez Canals) were involved in projects of water conservancy. However, "it was reported that in a flood in Kwangtung in June 1959, 28,000 large and small water conservancy structures were destroyed; in Shansi, in 1956, 23,018 structures were destroyed by floods. Many instances of this kind could be cited."<sup>2</sup>

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<sup>1</sup> Edwin P. Reubens, "Underemployment Theory and Chinese Communist Experience," Asian Survey, December 1964, pp. 1196, 1203.

<sup>2</sup> Wen-Shun Chi, "Water Conservancy in Communist China," The China Quarterly, July-September 1965, p. 50. I wish to acknowledge the valuable assistance of K. C. Yeh and Nancy Nimitz, both of RAND, in the preparation of this discussion of labor-intensive projects

Attempting to bolster his case for labor-intensive agricultural projects, Professor Griffin notes that in the Tizi-Ouzou region of Algeria "the rate of return on investment in the first year was a minimum of 15.6 per cent." Since he provides no supporting evidence for this figure or a reference to the larger study from which the figure came, one cannot evaluate this experience. It suffices to say here that such single-point estimates of net return can be treacherous guides to sound decisionmaking. For they are very sensitive to (a) the interest rate used in discounting future flows of costs and benefits, (b) the number of years capital goods and equipment are expected to last, (c) the way that revenues and costs are estimated (is allowance made for disparities between private and social costs and benefits and if so, what estimating procedure is employed?), (d) how uncertainty is taken into account, given the fact that both future costs and benefits are frequently subject to wide ranges of error.<sup>1</sup>

#### V. CONCLUDING REMARKS

Despite Latin America's generally favorable natural resource endowment, economic and social progress remains frustratingly slow and uneven, with large groups of the population continuing at bare subsistence. Viewing the potential of the region, one has powerful incentive to seek explanations and to offer guidance for the future. In this endeavor, it is all too easy to blame foreign investors and the composition of trade for impoverishment, to castigate particular governments for not doing enough, and to draw inappropriately from the experiences of other countries. The very complexity of the process of development combined with the urgency for change frequently clouds real issues, highlights false ones and enlarges the scope for hasty recommendations and calls to action which, if acted upon, would do great harm. Caution and care in analysis, not to be confused with lack of imagination and enthusiasm, are clearly essential in treading intellectual quicksand.

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<sup>1</sup> A detailed cost/benefit analysis of four large agricultural projects in Peru illustrating these problems is contained in Delbert Fitchett, Investment Strategies in Peruvian Agriculture: Some Recent Experiences in Development Planning, RAND RM-4791-AID, June 1966.